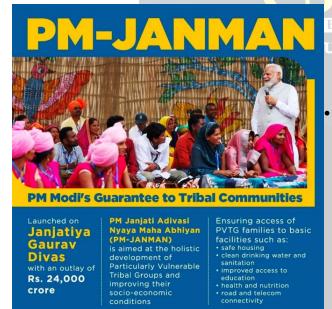
Bhogali Bihu

- Magh Bihu also called Bhogali Bihu or Maghar Domahi is a harvest festival celebrated in Assam, North-East India, which marks the end of harvesting season in the month of Magh (January-February).
- A bonfire (Meji) is lit for the ceremonial conclusion and prayer to the God of Fire. The festival is a regional variance of Makar Sankranti.
- The first day of Magh Bihu is known as Uruka or the Bihu Eve. On this day, women folk get ready for the next day with food items.
- The Hindu

Rs. 24,000

crore

PM - JANMAN



Particularly Vulnerable

improving their socio-economic

conditions

PM-JANMAN

(PM Janjatiya Adivasi Nyay Maha Abhiyan)

- Projects worth 24,000 crore for overall development of Particularly Vulnerable **Tribal Groups (PVTGS)**
- Mission based on providing amenities like safe housing, clean drinking water, sanitation, education, nutrition, roads, health. telecom connectivity and sustainable livelihood.
- Focus on complete coverage of various schemes including Ayushman Bharat Yojana, Sickle Cell Anemia Elimination Mission, TB eradication, vaccination, PM Surakshit 100% Matritva Yojana, PM Matru Vandana Yojana, Nutrition Campaign and Jan Dhan Yojana.
- According to the 2011 census, India has a Scheduled Tribe (ST) population of 10.45 crore, with 75 communities across 18 states and the Union Territory of Andaman and Nicobar **Islands** identified as Particularly Vulnerable Tribal Groups (PVTGs). These PVTGs continue to grapple with vulnerabilities in economic, and educational domains.

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In the Budget Speech for 2023-24, it was announced that a Pradhan Mantri PVTGs Development Mission will be launched to enhance the socio-economic conditions of Vulnerable Tribal Particularly **Particularly** Groups. This initiative aims to provide essential amenities such as secure housing, clean drinking water, sanitation, improved access education, health, and nutrition, as well as enhanced road and telecom

connectivity, and sustainable livelihood opportunities to PVTGs households and habitats.

- An allocation of Rs. 15,000 crores has been earmarked for the next three years under the Development Action Plan for the Scheduled Tribes (DAPST) to implement this mission.
- This campaign is an effort aimed at **PVTGs** families saturating with individual entitlements and habitations with basic facilities, by making these tribal communities awake of their entitlements. During the campaign period, Aadhar Card, **Community Certificate and Jan Dhan** Accounts will be provided as these are basic requirements for other schemes such as issue of Ayushman Card, PM Kisan Samman Nidhi, Kisan **Credit Card etc.**
- This initiative will ensure to cover Outevery PVTG household that has remained unreached because of distance, lack of road, and digital connectivity and will provide facilities at their doorstep. Places like Haat Bazar, CSC, Gram Panchayat, Anganwadi, Multipurpose Centre, Vandhan Vikas Kendras, and Krishi Vigyan Kendras will be used to organize these events.
- The Hindu

Modern computers and qubits

- Modern computers use semiconductor transistors to build circuits that function as bits.
- A semiconductor chip hosts more than 100 million transistors on 1 sq. mm. Imagine how small an individual transistor is and how close it is to adjacent transistors.
- As transistors become smaller, they become more susceptible to quantum effects. A fundamental limitation of conventional computing architecture is that each bit can exist in only one of the two states, 0 or 1.
- But according to quantum physics, a qubit can also be in a superposition of its two states at the same time
- To perform one calculation that requires 16 different inputs, a classical computer requires a total of four bits and sixteen computations.
- But with four qubits in superposition, a quantum computer could generate answers corresponding to all 16 inputs in a single computation.

Gate in computing

 A bit is the smallest piece of information storage (it is a portmanteau of binary digit).

- Often, a large number of bits is required to convey meaningful information.
- With the advent of modern semiconductor technology, we routinely speak of household computers having a few terabytes (8 trillion bits) of information storage.
- One terabyte can store 500 hours of high definition video content. In a computer, a bit is a physical system with two easily discernible configurations, or states e.g. high and low voltage.
- These physical bits are useful to represent and process expressions that involve 0s and 1s: for instance, low voltage can represent 0 and high voltage can represent 1. A gate is a circuit that changes the states of bits in a predictable way.
- The speed at which these gates work determines how fast a computer functions.
- The quantum gate Modern computers use semiconductor transistors to build circuits that function as bits.
- A semiconductor chip hosts more than 100 million transistors on 1 sq. mm.

- Imagine how small an individual transistor is and how close it is to adjacent transistors.
- As transistors become smaller, they become more susceptible to quantum effects.
- Moore's law, announced in 1965, states that computing power increases tenfold every five years.
- This law no longer holds as we have already slowed to a twofold increase every five years.
- But this doesn't have to mean we are nearing the end of computing development: the quantum revolution is coming.
- The most basic unit of a quantum computer is a quantum bit, or qubit.
- Like in a conventional computer, it is a physical object that has two states.
- A quantum gate is a physical process or circuit that changes the state of a qubit or a collection of qubits.
- In the quantum computing context, if particles or superconducting qubits are the physical qubits, the gate is often an electromagnetic pulse.

What gates do??

- In quantum computers, quantum gates act on qubits to process information.
- According to quantum physics, a qubit can also be in a superposition of its two states at the same time.
- The Hindu

Global surgery

What is global surgery?

- Global surgery focuses on equitable access to emergency and essential surgery.
- While it predominantly focuses on low and middle-income countries (LMICs), it also prioritizes access disparities and under-served populations in high-income countries (HICs).
- These "surgeries" include essential place fake videos of celebrities. and emergency surgeries such as surgery, obstetrics, trauma, and anaesthesia (SOTA).
- Despite small differences, there is largely a consensus across multiple international groups on about thirty procedures that fall under the umbrella of emergency and essential surgery.

The Hindu

Regulating online gaming

With a staggering 692 million Internet users, India has the world's second-largest Internet user base and ranks eighth globally in terms of time spent on mobile apps.

- The average daily mobile app usage has surged to 4.9 hours, a 32% increase since 2019.
- Notably, a significant 82% of usage is dedicated to media and entertainment with social media accounting for roughly half of this engagement.
- While this trend has generated significant benefits to people, it has also created new concerns.
- For instance, the Internet has been inundated with AI generated deep
- These technologically advanced simulations have blurred the lines between what's real and what's not.

The online gaming

- The online gaming industry in India is predominantly a homegrown startup ecosystem growing at 27% CAGR.
- It is widely estimated that AI and online gaming can add up to \$300 billion to India's GDP by 2026-27.

- The meteoric rise of online gaming has brought with it an array of concerns such as addiction, mental illness, suicides, financial frauds, privacy, and data security concerns.
- Money laundering and national security concerns are other realities.
- The situation is further exacerbated by the growth of illegal offshore gambling and betting markets wherein the volume of digital transactions provides fertile ground for financial malpractices.
- In July 2023, the Parliamentary Standing Committee on Finance, of which I am a member, identified four major trends in cybercrime.
- Notably, one includes the use of international online betting sites for purposes such as money laundering.
- No mechanism exists for individuals to differentiate between legitimate gaming platforms and illegal gambling/betting sites.
- In addition, in the absence of a specialised regulatory authority, enforcement is lacking. As a result, the number of illegal operators is multiplying by the day.
- The inherent cross-border nature of the Internet makes enforcing such a ban almost impossible, leading to the unintended consequence of

- legitimate, regulated platforms being replaced by unregulated and potentially harmful ones.
- In this context, the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 marked a commendable step towards oversight.
- Monetary Fund, a combination of high taxes and a weak, discretionary approach to regulatory enforcement creates the most fertile ground for the proliferation of a shadow economy an environment in which the Indian online gaming industry is operating.
- Therefore, establishing a strict regulatory framework is an urgent need, not just for protecting our EX digital nagriks and national interests, but raise a to responsible growth of the online gaming sector.
- The Hindu

Anti-defection and speaker

• In Rajendra Singh Rana vs Swami Prasad Maurya (2007), the Court had said that when a member or a group of members of the ruling party joins hands with the Opposition party and meets the Governor along with the Members of the Opposition and try to form an alternative government,

they can be said to have voluntarily given up the membership of their original party. Originally, under the Tenth Schedule, a legislator could avoid disqualification on two grounds.

- First, a split in his political party occurs wherein one-third of the legislators form a faction and break with that party.
- Second, the legislator's party merges with another party and not less than two-thirds of them agree to the merger and walk out of the original party. In both these cases the outgoing legislators could claim exemption from disqualification.
- But the split provision in paragraph 3
 of the Tenth Schedule was omitted
 through the 91st Constitution
 Amendment in 2003 ostensibly as a
 because of the frequent abuse of this out
 provision by ingenious legislators.
- Now only the merger provision in paragraph 4 remains which can protect defectors provided the conditions stipulated in paragraph 4 are met, the main condition being the merger of the defectors party with another party. It is an extremely difficult condition to fulfill, yet this condition is also being circumvented now in a number of cases.

Mount Marapi

- Mount Marapi, an active <u>volcano</u> located in the <u>Padang Highlands</u> of western <u>Sumatra</u>, <u>Indonesia</u>.
- The mountain is part of the Ring of Fire a long, horseshoe-shaped, seismically active belt that rings the Pacific Ocean.
- The highest peak among several volcanoes in the highlands, Mount Marapi rises to 9,485 feet (2,891 meters) above sea level.
- Its summit contains the Bancah caldera which has a diameter of 0.9 mile (1.4 km) and is characterized by a series of overlapping craters.
- Mount Marapi is often confused with a similar active volcano called Mount Merapi, which is located near the center of the island of Java, Indonesia.



The Hindu



The Hindu

Sagar island

• Rising sea level and erosion of the beach in front of the Kapil Muni temple on Sagar Island are turning out to be a damper on the Ganga Sagar Mela as the West Bengal government is desperately seeking a "national fair" status for the annual religious congregation.



Bay of Bengal





ES EXAMINATION)

Sagar Island

- Sagar Island is an island in the Ganges delta, lying on the continental shelf of Bay of Bengal about 100 km (54 nautical miles) south of Kolkata.
- This island forms the Sagar CD Block in Kakdwip subdivision of South 24 Parganas district in the Indian State of West Bengal.
- Although Sagar Island is a part of Sundarbans, it does not have any tiger habitation or mangrove forests or small river tributaries as is characteristic of the overall Sundarban delta.
- This island is a place of Hindu SAURABH PANDEY pilgrimage.
- Every year on the day of Makar Sankranti (14 January), hundreds of thousands of Hindus gather to take a holy dip at the confluence of river O UPSC BRILLIANCE Ganges and Bay of Bengal and offer prayers (puja) in the Kapil Muni Temple.

The Hindu